SEE FOLLOWING NOTE

PARTS OF THE ORIGINAL DOCUMENT

ARE OF POOR REPRODUCTIVE QUALITY

CERTAINES PARTIES DU DOCUMENT ORIGINAL

SONT DE PIÈTRE QUALITÉ DE REPRODUCTION

CANADA-U.S. TRADE NEGOTIATIONS -- IMPLICATIONS FOR THE CANADIAN WHEAT-USING INDUSTRIES

Ontario Ministry of Agriculture and Food

August 1987

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	v
1. INTRODUCTION	
1.1 Overview	1
1.2 Objectives	2
2. ECONOMIC AND STATISTICAL ANALYSIS OF THE WHEAT-USING INDUSTRIES	
2.1 Bread and Other Bakery Products	3
2.2 Biscuits	5
2.3 Prepared Flour Mixes and Prepared Cereal Foods Industry	6
2.4 Dry Pasta Products Industry	6
3. REGULATORY ENVIRONMENT	
3.1 Canadian Government Policies	8
3.2 United States Government Policies	11
3.3 Summary	11
4. ANALYSIS OF COMPETITIVENESS	
4.1 Competitiveness of the Industry	13
4.2 Product Competitiveness	17
4.3 Summary	25
5. INDUSTRY VIEWS OF THE IMPLICATIONS OF FREE TRADE NEGOTIATIONS	
5.1 Trade Associations	27
5.2 Corporate Sector	29
5.3 Ontario Wheat Producers' Marketing Board	29
5.4 Summary	30
6. IMPLICATIONS OF FREE TRADE	
6.1 Impact of Removal of Tariffs and the Two-Price Wheat Policy	31
6.2 Strategies for Processors and Producers	40
7. SUMMARY AND CONCLUSIONS	42
REFERENCES	45
APPENDICES	
A. Tables of Principal Statistics on the Wheat-Using Industries	46
B. Tables of Trade Statistics on the Wheat-Using Industries	49
C. Cost of Raw Wheat in End Products	58
D. Price Comparison of Selected Wheat-Based Goods	61
E. Bakery, Biscuit, Cereal and Pasta Products Establishments in Ontario, 1984	63

LIST OF TABLES

Table		Page
2.1	Import/Export Orientation of Canadian Trade in Terms of Wheat-Based Products, 1986	4
2.2	Importance of the U.S. as a Trading Partner of Canada in Selected Wheat-Based Products	4
3.1	Selected Tariffs on Imported Wheat-Based Products	10
4.1	Comparison of Productivity of Wheat-Based Industries, 1984	14
4.2	Comparison of Wage Rates Paid in Selected Wheat-Based Industries, 1984	15
4.3	Comparison of "Average" Plant Size in Selected Wheat-Using Industries, 1982	16
4.4	Wheat as a Percentage of Raw Material Cost in Canadian Industries, 1984	17
4.5	Costs of Production for 16 oz. Loaf of White Bread in the U.S. and Canada, 1986	18
4.6	Value of Wheat in Selected Wheat-Based Products, 1986	21
4.7	Comparison of 1986 Consumer Prices of Two Selected Wheat-Based Products in Canadian dollars	22
4.8	Comparison of Financial Indicators in Selected Wheat-Using Companies in Canada and the U.S., 1986	23
6.1	Cost Savings of Dismantling the Two-Price Wheat Policy in Selected Canadian Wheat Using Industries	33
6.2	Cost Savings of Dismantling the Two-Price Wheat Policy to Selected Wheat-Based Products, Canada	34
6.3	Comparison of Costs of Production for 16 oz. Loaf if Ontario Bakers Purchase Wheat in the Form of Flour at the U.S. Price	35
6.4	Comparison of Tariff Protection and Savings Resulting from Dismantling the Two-Price Wheat Policy	36

LIST OF APPENDIX TABLES

Table		Page
A.1	Principal Statistics of Bread and Bakery Products Industry, 1982-1984, in Canadian dollars	47
A.2	Principal Statistics of Biscuit Industry, 1982-1984, in Canadian dollars	47
A.3	Principal Statistics of Prepared Flour Mixes and Cereal Foods Industry, 1982-1984, in Canadian dollars	48
A.4	Principal Statistics of Pasta Industry, 1982-1984, in Canadian dollars	48
B.1	Value of Trade by Commodity, 1980-1986	50
B.2	Volume of Trade by Commodity, 1980-1986	51
B.3	Canada's Major Trading Partners in Flour-Based Products, Canada, 1986	52
B.4	Importance of Ontario Trade to Canada's Trade, 1986	53
B.5	Volume of Trade by Commodity, Ontario, 1980-1986	54
B.6	Value of Trade by Commodity, Ontario, 1980-1986	55
B.7	Ontario's Major Trading Partners in Wheat-Based Products, 1986	56
B.8	Importance of the U.S. as a Trading Partner of Ontario	57
D.1	Comparison of Selected Wheat-Based Products in Selected Regions and Cities of U.S. and Canada, 1986	62
E.1	Bakery, Biscuit, Cereal and Pasta Products Establishments in Ontario, 1984 - employing over 100 people	63

EXECUTIVE SUMMARY

Canada and the United States are engaged in trade negotiations to achieve a broad package of mutually beneficial trade barrier reductions. These reductions which began in May, 1986, are to be concluded by the fall of 1987. The final trade settlement may involve the removal of both tariff barriers and significant non-tariff barriers (e.g. quotas, health and phytosanitary regulations, product standards, etc.).

This paper investigates some of the main implications of removing tariffs and the two-price wheat policy on Canada's major wheat and flour using industries. The paper provides a thorough review of the current trade in wheat and processed wheat products, industry and product competitiveness, the regulatory environ- ment, and industry views. Lastly the paper outlines some possible strategies that could be pursued by wheat producers and processors under a freer trade scenario.

An examination of the competitiveness of the Canadian and U.S. wheat using industries reveals that the differences in labour productivity are most significant. The two-price wheat policy is found to cause significant input cost disparities adversely affecting Canada's competitiveness at the final product stage. For an industry characterized by high volume and low margins, these cost differences are critical. It would appear that tariffs on these final goods offset some of the cost differences caused by the two-price wheat policy.

The simultaneous removal of final product tariffs and the two-price wheat policy was found to cause:

- a decline in consumer prices of wheat based products with the possible exception of pasta products;

- reductions in processors cost of production resulting from lower wheat prices;

- a possibility of increasing imports of U.S. goods, tempered however by an enhanced price competitiveness of Canadian goods following the removal of two-price wheat;

- possibility of either job losses in Canada as a result of potential increases in U.S. products or increased employment opportunities resulting from the expansion of a more competitive domestic industry;

- potential losses to Canadian and Ontario wheat producers of $230 million and $30 million respectively possibly counterbalanced somewhat by increased domestic sales.

It must be acknowledged that this analysis does not examine the possible benefits to these Canadian processing industries due to their greater access to lower priced sweeteners (sugar). The maintenance of the domestic U.S. sugar policy and subsequent higher U.S, prices, above world price levels, will provide a competitive edge to the Canadian industries. A more detailed analysis would be required to examine the impact of all policies and possible policy changes on the competitiveness of these Canadian industries.

Possible strategies for Canadian wheat using processors under a freer trade environment could be to:

- move toward specialized, value-added products in order to capture niches in domestic and U.S. markets;
- improve marketing techniques, in particular, the application of "packaged goods" marketing;
- increase investment in equipment and plant facilities in order to improve labour productivity and efficiency;
- price more competitively in the Canadian market in order to compete with and displace imports of U.S. products;

Options for domestic wheat producers could include:

- reducing production in response to lower domestic prices;
- engaging in an aggressive marketing campaign to enhance the image of domestically produced wheat products.

1. INTRODUCTION

1.1 OVERVIEW

Canada and the United States are in engaged in trade negotiations to achieve a broad package of mutually beneficial trade barrier reductions. These trade negotiations which began in May, 1986, are scheduled to be concluded by the fall of 1987. The final settlement may involve the removal of, not only tariff barriers, but also significant non-tariff barriers (e.g. quotas, health and disease regulations, product standards, etc.).

This paper assesses the implications of tariff removal on Canada's food processing industries that use wheat or flour as their primary raw material, excluding flour milling. The industries under consideration include:

1. Bread and Other Bakery Products;
2. Biscuits;
3. Prepared Flour Mixes and Prepared Cereal Foods, excluding flour; and
4. Pasta.

An appreciation of the economic importance of these industries is gained when one considers that in 1984 they produced shipments valued at $2,417.9 million (7.6 percent of Canadian food shipments) and they employed 20,537 production workers (15.8 percent of Canadian food workers). Of this, Ontario produced ship- ments worth $1,207.2 million and employed 9,532 production workers. Together these industries use approximately 8 to 9 percent of Canadian wheat production marketed through the CWB, amounting to approximately 2.0 million tonnes and 25 percent of the wheat marketed through the OWPMB, amounting to approximately 0.25 million tonnes. Since 1980, Canadian wheat users have been forced to pay significantly higher prices for wheat than their U.S. counterparts - critical in such high volume/low margin businesses.

The impetus for this study has been provided by the probable outcome of trade negotiations, leading to the removal of both tariffs and the two-price wheat policy. Previously, the Grocery Products Manufacturers of Canada (GPMC) had claimed that

wheat-using industries would be adversely affected if tariffs were removed but the two-price wheat policy retained. In contrast, the Canadian Wheat Board (CWB) and the Ontario Wheat Producers' Marketing Board (OWPMB) argue that as the cost of wheat in the finished good is a minor component of cost, the two-price wheat system should be retained.

1.2 OBJECTIVES

The primary objective of the study is to assess the implications of tariff removal on selected wheat-using industries as defined earlier. This objective necessitated the development of secondary objectives which are as follows:

1. To review the current state of these industries in Canada, Ontario and the United States;
2. To identify the regulatory environment;
3. To examine the present trade situation of Canada and Ontario;
4. To assess the competitiveness of the Canadian industries; and
5. To collect industry views toward free trade.

2. ECONOMIC AND STATISTICAL ANALYSIS OF THE WHEAT-USING INDUSTRIES

This section presents a general economic and statistical analysis of the Canadian, Ontario and American wheat-using industries that are under current consideration. Flour will not be discussed except within the context of it being a component of the final product. This review will allow comparison of the Canadian industries with their American counterparts using statistics presented in Appendix A. In addition, an examination of trade occurring in these goods will be included. Analysis of the present trade situation must be undertaken before one can attempt to hypothesize the effect that free trade will have. In this respect, imports are important when considering their contribution to domestic supply. Exports are important as they increase the total demand for shipments produced by Canadian manufacturers.

2.1 BREAD AND OTHER BAKERY PRODUCTS

Statistics Canada designates this industry as consisting of those establishments engaged in dough mixing, kneading and baking to manufacture "perishable" bakery products but excluding bakeries which bake their products and sell them over the counter to final consumers. Items produced by this industry include bread, rolls, doughnuts, pies, cakes, etc. In 1984, the Canadian baking industry employed 13,210 production workers and the value of shipments were $1,340.9 million. In contrast, the U.S. bakery products industry employed 84,800 production workers and the value of industry shipments was $17,741.3 million (Cdn.).

Of particular note is that Ontario accounts for 36.8 percent of the value of Canadian shipments. The value of shipments increased at average annual rates of 2.4 percent and 4.7 percent in Canada and the U.S. respectively from 1980 to 1986.

2.1.1 Trade

Canadian trade statistics for these goods are presented in Appendix B. While trend analysis reveals that imports and exports had annual average growth rates of 18.2 percent and 15.7 percent respectively, Canada had a trade surplus for these products of $20.9 million in 1986.

Table 2.1: Import/Export Orientation of Canadian Trade in Terms of Wheat-Based Products, 1986

Product	Import/New Supply Ratio	Export/Shipment Ratio
Bread	.013	-
Rolls	.025	-
Bread/Rolls	-	.014
Biscuits	.083	.088
Macaroni	.096	.098
Breakfast Cereals	.082	.024
Cereal Grain Products	.192	.023

New Supply = imports + shipments
Source: Statistics Canada, Cat. No.'s 65-202, 65-203, 32-202, 32-203, 32-244 & 32-228.

As shown in Table 2.1, limited trade occurs as compared to industry shipments. This can be explained by the fact that bread and rolls, the predominant products of this group are limited by their characteristics of perishability and low profit margins. Furthermore, Tables 2.2 and C.3 show that greater than 80 percent of Canadian trade occurs with the U.S. Reasons for the reliance upon U.S. markets are:

1. Proximity of the U.S. which favours the transport of perishable goods such as bread and rolls.

2. Favourable trade policies of the U.S. whereupon only Canadian cereal products and breakfast cereals face limited tariffs.

Table 2.2: Importance of the U.S. as a Trading Partner of Canada in Trade of Selected Wheat Based Products

Product	Exports to the U.S. as % Canadian Exports of Wheat Based Products	Imports from the U.S. as % Canadian Imports of Wheat Based Products
Biscuits	94.62	27.86
Bakery Products	97.30	81.26
Macaroni	95.14	18.58
Breakfast Cereals	82.85	99.73

Source: Statistics Canada, Cat. No.'s 65-202 & 65-203.

Looking at Ontario trade patterns, a similar picture continues. As shown in Tables B.6 and B.7, Ontario imports and exports grew from 1985 to 1986 by 17.0 percent and 14.9 percent respectively, leading to a trade surplus of $22 million in 1986. The U.S. again distinguishes itself as Ontario's major trading partner for reasons discussed previously.

2.2 BISCUITS

This industry which consists of those establishments primarily engaged in the manufacturing of biscuits, crackers and related products is given SIC codes of 1071 and 1052 in Canada and the U.S. respectively.

In 1984, the Canadian biscuit manufacturing industry produced shipments valued at $489 million using 4,503 production workers. The U.S. counterpart produced industry shipments of $7,409 million (Cdn.) while employing 36,000 production workers. Similar to the bakery products industry, the U.S. biscuit manufacturing industry which has an annual average growth rate (1980-1986) of 11.2 percent is approximately 14.4 times larger than the Canadian equivalent with a 7.3 percent growth rate. Ontario shipments contribute 52.4 percent of Canadian shipments.

2.2.1 Trade

Canadian trade data may be found in Appendix B. However, it includes data only for cookies and biscuits as cracker trade is included in the bakery products (NES) category. A trade surplus in 1986 of $11.6 million and annual import and export growth of 22.9 percent and 31.1 percent are most noteworthy. Unlike bakery products, imports and exports of biscuits are significant when compared to domestic shipments (Table 2.1). In particular, exports allow Canadian manufacturers to take advantage of economies of scale by providing another market in addition to the domestic one. Although the U.S. is a market for greater than 90 percent of our exports, it supplies only 27 percent of our imports as indicated in Table 2.2.

Paying closer attention to the Ontario industry, imports and exports had annual growth rates of 23.3 and 36.9 percent between 1980 and 1986. In 1986, Ontario had a trade surplus of $27.8 million.

2.3 PREPARED FLOUR MIXES AND PREPARED CEREAL FOODS INDUSTRY

This industry includes those establishments engaged in manufacturing prepared flour mixes and prepared cereal foods, either uncooked or ready-to-serve. In Canada, the industry has been given the SIC code of 1052; its U.S. equivalent includes two sectors given SIC codes of 2043 and 2045. The value of Canadian industry shipments was $437.4 million versus $2,126.1 million Cdn. for the U.S. equivalent in 1984. While the number of production workers employed in Canada and the U.S. were 1,880 and 5,000 respectively. Ontario shipments account for 86.5 percent of Canadian shipments. A final note is that the U.S. industry has been enjoying substantially better growth than its Canadian counterpart.

2.3.1 Trade

Analysis of Canadian trade statistics presented in Table B.1 and B.2 reveals that from 1980 to 1986, imports and exports grew at 30.5 percent and 36.5 percent respectively. Nevertheless, imports and exports were valued at $54 million and $20.8 million respectively in 1986. The popularity of "ready-to-eat" (RTE) cereals contributed to both import growth and the trade deficit that are observed in this group of commodities. Furthermore, RTE cereals are a fairly high margin item which could account for the active pursuit of Canadian markets by U.S. firms. Similar to the biscuit industry, reliance is placed upon export markets, with the U.S. receiving greater than 90 percent of exports.

Closer analysis of the Ontario cereal products industry reveals similar trade patterns. Although between 1980 and 1986, exports grew at 42.0 percent as compared to import growth of 34.2 percent, Ontario had a trade deficit of $16 million. The United States received 82.5 percent of Ontario's exports in 1986.

2.4 DRY PASTA PRODUCTS INDUSTRY

This industry comprises establishments primarily involved in the manufacturing of dry pasta products. In 1984, Canadian pasta manufacturers employed 944 production workers to produce industry shipments valued at $149.8 million. In the U.S., this industry employed 5,500 production workers to produce shipments valued at $1,653.7

million Canadian. Ontario shipments amounted to 52.5 percent of Canadian shipments. Although the U.S. industry had an annual growth rate of 12.9 percent, the Canadian pasta industry declined by 3.6 percent per year between 1982 and 1984.

2.4.1 Trade

Recent trade statistics are presented in Tables B.1 and B.2. Of particular note is that imports have grown in value at 17.9 percent annually as compared to export growth of 1.6 percent. Despite this, Canada's trade deficit in this industry is only $2.0 million.

Furthermore, as in other sectors of the wheat-using industries, export markets are used to supplement a limited domestic market as shown in Table 2.1. Unlike other segments of the wheat-using industries, the U.S. provides less than 20 percent of imports. However, as in the other industries, the United States is Canada's largest export market.

Focussing upon Ontario data presented in Tables B.6 and B.7, similar patterns are observed as in the Canadian industry. As before imports have grown faster than exports with annual growth rates of 33.6 percent and 7.0 percent. However, the Ontario industry had a positive trade balance of $5 million with the U.S. receiving 96 percent of Ontario exports.

3. REGULATORY ENVIRONMENT

Government policies have had a profound effect on the wheat-using industries located within both Canada and the United States. Their greatest influence has been exerted on input cost and availability and product marketing, through the use of marketing boards and tariffs respectively.

3.1 CANADIAN GOVERNMENT POLICIES

Marketing Boards

Various national supply management and marketing boards control the price and supply of key inputs into the industries under consideration. Their greatest effect is exerted on price, leading to Canadian manufacturers incurring significantly higher costs than their American counterparts. Canadian processors are prohibited from obtaining supplies from alternative sources through controls on imports.

The Canadian Wheat Board and Two-Price Wheat:

Federal legislation established the Canadian Wheat Board (CWB) to handle all sales of prairie-grown wheat, oats, and barley for domestic or international consumption. This board supplies almost all Canadian hard wheat, used for domestic food consumption. The domestic market for hard wheat accounts for 8 percent of western wheat production; the rest is exported.

The price range within which the CWB will sell wheat for Canadian human consumption was established under the terms of the Two-Price Wheat Act. Under the Act, maximum and minimum prices were set. Price would be the CWB's export price subject to the maximum and minimum. If the world price were above the maximum, the federal treasury would compensate the CWB for selling below the world price.

The Two-Price Wheat Act expired in 1980 and from then forward CWB pricing of domestic wheat was provided for in regulations governing the CWB. In March 1986, the CWB set the price of domestic hard wheat at $7.00/bushel. This price still remains in place.

In addition to price-setting, the CWB controls the imports of wheat, flour, and flour-based products through the issue of licences. While imports of wheat or flour are not permitted, imports of flour-based products are permitted. Nevertheless, it is a complaint of the Independent Bakers Association, a trade association in the U.S., that licences are difficult to obtain and require renewal every 45 days (Bakery Newsletter, August 10, 1987). Some concessions have been made to domestic processors serving export markets. In this respect, a reimbursement based upon the difference between domestic wheat price and the world wheat price component of their product has been established.

Ontario Wheat Producers' Marketing Board:

Most soft wheat used in Canada for direct human consumption is marketed through the Ontario Wheat Producers' Marketing Board (OWPMB). This amounts to 25 percent of Ontario's soft wheat production.

The OWPMB sets a price for domestic soft wheat based upon the CWB's price for hard wheat. It is for this pricing schedule that the OWPMB finds itself under attack from Ontario manufacturers of flour-based products. The purported reason is that not only is the domestic price of hard wheat greater than the world price of hard wheat, but the world price of the hard wheat is greater than the world price of soft wheat.

Tariffs

Tariffs on imports of wheat-based products are summarized in Table 3.1. Canadian tariffs levied on the imports to Canada act as an additional cost for exporters such as the United States. Many Canadian processors argue that present tariffs act as limited barriers to U.S. imports whose price advantage is gained solely through wheat price differentials.

Table 3.1: Selected Tariffs on Imported Wheat-Based Products

Canada			United States		
Tariff Item No.	Article	MFN Rate 1987	Tariff Item No.	Article	MFN Rate 1987
#4505-1	Breakfast cereal foods, packaging not exceeding 25.0 lbs. each	10%	182.30	Cereal breakfast foods and similar cereal preparations, further processed than milling	2.5%
#4600-1	Prepared cereal foods, n.o.p.	7.5%	183.01	Pancake flour and other flour mixes; refrigerated doughs	10.0%
#4605-1	Bread, rolls and buns, made with yeast (ex. sweet goods)	Free	182.25	Bread made with the use of yeast as the leavening substance	Free
#6600-1	Biscuits sweet. Biscuits unsweet.	5.0% 5.0%	182.20	Biscuits, cakes, cake, wafers and similar baked products & pudding, whether or not contain. choc., fruits and nuts	Free
#6700-1	Macaroni & vermicelli containing no egg or other added ingredients	Free	182.35	Macaroni, noodles, vermicelli and similar alimentary pastas	Free
#14100-1	Sweetened breads, cakes, and pies	15.5%			

Source: American Tariffs -- Tariff Schedules of the United States Annotated (1987), Schedule 1.

Canadian Tariffs -- Tariff Schedule A, Canadian Customs, 1987, updated January 1, 1987.

3.2 UNITED STATES GOVERNMENT POLICIES

The U.S. Farm Bill - The Food Security Act (FSA) of 1985

The impact of price and income supports, in the form of the loan rate and the target price respectively, is the chief concern of Canadian wheat producers. Specifically, it is the level of wheat subsidy which amounted to $3.6 billion (U.S.) in 1985 which has caused concern for Canada.

The loan rate ($2.28/bushel, 1987), serving as a floor price for wheat in the U.S., is the rate that the U.S. government pays producers to put their crop in government storage for nine months. If the world price is below the loan rate, the farmer will put the crop into government stocks and receive a deficiency payment, which in these circumstances is equivalent to the difference between the loan rate and the market price.

The target price ($4.38/bushel, 1987), higher than the loan rate, is the price determined to achieve a reasonably acceptable income. If the world price is greater than the loan rate, farmers receive that price in addition to a deficiency payment, equal to the difference between the target price and the world price.

Tariffs

As revealed in Table 3.1., Canada presently faces few tariffs on wheat-based products entering the U.S., with the exception of cereal grain products and breakfast cereals. American tariffs have effects as discussed previously.

3.3 SUMMARY

The loan rate which is essentially the U.S. market price for wheat, is currently $3.85/bushel (Cdn.) less than the price Canadian processors must pay for domestic wheat purchased through the CWB and the OWPMB. This in turn leads to higher production costs than their counterparts in the U.S.

Many Canadian processors feel that this is an enormous constraint placed on their ability to compete with U.S. manufacturers of wheat-based products.

Currently, Canadian processors feel somewhat compensated for their lack of competitiveness, resulting from the two-price wheat policy, by both tariffs on wheat-based goods entering Canada and reimbursements to Canadian processors exporting wheat-based goods. However, with the removal of these tariffs, the present wheat marketing system requires evaluation of its efficacy.

4. ANALYSIS OF COMPETITIVENESS

An analysis of competitiveness at the product and industry level allows one to determine if Canadian industries are able to compete with American counterparts if tariff barriers are dismantled. This in turn may be used in assessing the implications of "free trade". Given the complexity of this subject area, a review of similarities and differences between the industries of each country will be undertaken rather than an attempt to draw conclusions. Similarly, it should be noted that these measures of competitiveness possess inadequacies.

4.1 COMPETITIVENESS OF THE INDUSTRY

Analysis of the industry allows general assessment of the competitiveness of the Canadian wheat-based industries. To be discussed will be:

1. Labour Productivity;
2. Wage Rates; and
3. Size of Establishments.

4.1.1 Labour Productivity

This somewhat crude measure of performance is important when assessing the ability of Canadian industries to compete with their U.S. counterparts given the data that is available. Productivity, amount of output per unit of labour, will be measured both by value of shipments per production hour and by value added per person hour. It should be noted that this measure does not imply or suggest that Canadian labourers are inefficient, simply that this measure focuses on labour as a common element in both countries' industries. However, apparent differences in productivity may not be strictly due to differences in efficiency between American and Canadian industries. Instead, they may be the result of American processors producing a larger percentage of their shipments as high valued products as compared to their Canadian counterparts.

As shown in Table 4.1, U.S. value of shipments per production worker hour were 49 percent, 57 percent, 68 percent, 108 percent and 110 percent greater than their

Canadian counterparts for the biscuit, cereal grain flour, pasta, prepared cereal foods and bakery products industries respectively.

Table 4.1: Comparison of Productivity of Wheat-Based Industries, 1984

Industry	Production Hrs.	Value Shipments	Value Added	Value Shipments/Hr.	Value Added/ Hr.
	million	- $ Cdn. million -		- $ Cdn./hr. -	
Bread & Other Bakery Products					
Canada	26.1	1,340.9	743.5	51.38	28.49
U.S.	164.2	1,7741.3	1,0753.1	108.05	65.49
Cookies/Crackers					
Canada	9.2	489.7	268.2	53.23	29.15
U.S.	72.0	7,361.2	4,481.2	102.24	62.24
Macaroni & Spaghetti					
Canada	2.0	149.8	63.1	74.9	31.55
U.S.	11.1	1,401.4	749.4	126.2	67.52
Flour & Other Grain Products					
Canada	4.0	785.8	154.6	196.5	38.65
U.S.	22.3	6,869.8	1,564.1	308.1	70.14
Blended & Prepared Flour Mixes & Cereal Foods					
Canada	3.8	437.4	243.9	115.1	64.2
U.S.	36.4	8,738.8	5,436.3	240.1	149.4

* Rate of Exchange: $1.29 Canadian = $1.00 U.S. average for 1984 according to Bank of Canada Review, May 1987.

Source: Statistics Canada - Census of Manufacturers, Cat. No. 31-203.
U.S. Department of Commerce, 1984 Annual Survey of Manufactures.

Value added per production hour was greater in the U.S. by 130 percent, 114 percent, 114 percent, 82 percent, and 133 percent than in Canada for the bakery products, biscuit, pasta, cereal grain flour and prepared cereal foods industries respectively.

This analysis demonstrates the considerable differences in labour productivity between the two countries. Suggested reasons for the greater productivity of the American industries are greater investment in equipment, and economies of scale, resulting from operation at a production level that is eight to ten times greater than is possible by their Canadian counterparts. Nevertheless, tariff removal may exert pressure on Canadian firms to improve efficiency and/or productivity.

4.1.2 Wage Rates

Another measure of the ability of Canadian manufacturers of flour-based products to compete with their U.S. counterparts is the wage rate within the industries. As shown in Table 4.2, U.S. processors in the industries under consideration pay base wages that are 6 to 40 percent greater than their Canadian counterparts.

Table 4.2: Comparison of Wage Rates Paid in Selected Wheat-Based Industries, 1984

Country	Wage Rate				
	Bread & Bakery	Cookies & Crackers	Pasta	Flour & Cereal	Prep. Cereal Foods
	- $ Canadian/hr.* -				
Canada	9.58	9.80	8.61	12.82	13.61
U.S.	12.38	11.74	10.23	13.61	18.14

* Rate of Exchange: $1.29 Canadian = $1.00 U.S. average for 1984 according to Bank of Canada Review, May 1987.

Source: Statistics Canada - Census of Manufacturers, Cat. No. 31-203.
U.S. Department of Commerce, 1984 Annual Survey of Manufactures.

Although these figures would suggest that Canadian employers possess a distinct advantage, total labour costs in Canada are greater than those paid in the U.S. Such a total wage package would include fringe benefits (company pension, health care, vacation pay, life insurance, etc.) and social benefits (U.I.C., C.P.P., Workers' Compensation, etc.). These are common in Canada, but relatively uncommon in U.S. food industry labour agreements.

4.1.3 Size of Establishments

An examination of the size of establishments for each of the industries under consideration gives evidence of industry competitiveness gained from economies of scale. Economies of scale occur when increased levels of production are possible as the size of the served market increases. In this respect, U.S. processors, serving a market that is ten times greater than the Canadian market, would be thought to benefit from economies of scale not realized by their Canadian counterparts. As a means to substantiate this hypothesis, an "average" plant size for each industry may be used. A crude estimate of "average" plant size may be obtained by dividing total industry shipments by the number of plants in the industry. These estimates appear in Table 4.3.

Table 4.3. Comparison of "Average" Plant Size in Selected Wheat-Using Industries, 1982

Country	Average Size			
	Bread & Bakery	Cookies & Crackers	Pasta	Prep. Flour Mixes and Cereals Foods
	- $* Shipments in '000/plant -			
Canada	2306.3	15250.0	7715.0	22157.9
U.S.	7036.9	16081.0	N/A	15777.5

* Rate of Exchange: $1.23 Canadian = $1.00 U.S. average for 1982 according to Bank of Canada Review, May 1987.

Source: Statistics Canada - Census of Manufacturers, Cat. No. 31-203,
U.S. Department of Commerce, 1984 Annual Survey of Manufactures.

Upon analysis of the above data, U.S. industries with the exception of the bread and other bakery products industries do not appear to possess an "average" plant size significantly greater than their Canadian counterparts. This suggests that Canadian industries have recognized and adjusted to the limitations of serving a small domestic market.

4.2 PRODUCT COMPETITIVENESS

In this report, product competitiveness will focus on the the processing of the raw materials, including flour, into the finished product, i.e. biscuits, bakery products, pasta, breakfast cereals. Aspects to be studied include costs of processing, price of wheat products, profit margins, return on equity, and adoption of new technology and products.

4.2.1 Costs of Processing

Costs of processing include food materials, transportation, labour, storage, equipment, etc. Given that the two-price wheat policy and its effect on competitive- ness between Canadian and U.S. processors is a concern of this study, the cost of the raw material as a component of all production costs will be examined most thoroughly.

Raw Materials:

Within this section, the cost of wheat as a component of raw material costs will be the focus. The data in Table 4.4 support the claim of Canadian processors that the two-price wheat policy significantly affects their competitiveness.

Table 4.4: Wheat as a Percentage of Raw Material Cost in Canadian Industries, 1984

Industry	Wheat as % of Raw Material Cost[a]
Bakery Products	53-56
Biscuit	30-35
Prepared Flour Mixes & Prepared Cereal Foods	20-24
Pasta	80-85

[a] Excluding packaging materials and manufacturing supplies.
Source: Statistics Canada - Cat. No. 32-202, 32-203, 32-224 & 32-228.

Given this relationship, wheat costing twice that of American wheat increases costs for raw materials from 10 to 42 percent.

However, the importance of the cost of wheat, in the form of flour, may be demonstrated most effectively if the cost structures of specific finished goods are studied. White pan bread was selected for this task because cost data was most easily obtained for it and the Canadian product has a U.S. equivalent. In this respect, critical factors, in addition to the cost of wheat, affecting the industry may then be illustrated. Nevertheless, its cost structure should not be taken as representative of all wheat-based products.

White Bread:

The following wheat-flour-bread relationship (OMAF, PDR Notes, August 7, 1986) will be used to analyze the costs of production for white pan bread in Ontario.

Quantity Relationship:

* 2.3 bushels of wheat produces 100 lbs. of flour; and
* 100 lbs. of flour yield 100 - 1.5 lb. loaves of bread;

Price Relationship:

* Wheat Price = $7.00/bushel (Ontario/Canada)
* 2.3 bushels x $7.00/bushel = $16.1/100 loaves (Ontario/Canada); and
* 16.1 cents/24 oz. loaf or 10.7 cents/16 oz. loaf (Ontario/Canada).

In the United States, wheat contributes approximately 7.2 U.S. cents or 9.8 Cdn. cents to production costs per 16 oz. loaf (American Bakers Association). These costs for wheat may be then calculated as a component of all other production costs presented in the Table 4.5.

Table 4.5: Costs of Production for 16 oz. Loaf of White Bread in the U.S. and Canada, 1986

	U.S. (Cdn. $)	%	Ontario	%
Ingredients	.160	45	.215	57
Packaging	.028	7	.024	6
Labour	.124	33	.082	22
Other	.053	15	.057	15
Total	.365	100	.378	100

Source: Canadian Data - OMAF, PDR Notes, August 7 1986
U.S. Data - American Bakers Association, "1985 Cost Survey", 1987.

Using the values above in Ontario, wheat represents 28.3 and 49.8 percent of Ontario bakers' production costs and ingredient costs, respectively. In the U.S., wheat represents 26.8 and 61.3 percent of production and ingredient costs, respectively. This information casts some doubts on the argument of Canadian bakers that the cost of wheat flour places them at a disadvantage as compared to their U.S. counterparts. However, Ontario possess a slight advantage in the costs of production due to the value of the Canadian dollar.

Other Wheat-Based Products:

Cost information was not readily available for other specific finished products as it is considered to be a trade secret. However, the Association of Canadian Biscuit Manufacturers (2) states that raw material costs account for 28.1 percent of the cost of biscuit products, with flour representing 30 percent of the total cost of raw materials. In a submission to the Canadian government (3), John Labatt Ltd states that wheat accounts for 50 percent of the cost of pasta manufacturing and that raw materials account for 40 percent of the retail price. Of final note is that a spokesman for a major Canadian cereal manufacturer states that paying the extra premium demanded for Canadian wheat and wheat flour accounts for 34 percent of their current costs for these raw materials.

In addition to flour, sugar is a significant raw material of these industries with the exception of the pasta industry. The Association of Canadian Biscuit Manufacturers (2) estimates that sweeteners account for 25 to 40 percent of raw material value and 7 to 11 percent of total production costs. In the other industries, sweetener use though less extensive is nonetheless important; for example, sugar accounts for 4 percent of costs in the bakery products industry. Similar degrees of sweetener use are found in U.S. counterparts. At present, Canadian processors are able to purchase refined sugar at the world price of 8.7¢/lb. while U.S. processors pay 24.1¢ Canadian/lb. to support their domestic industry.

Other key inputs of these industries, such as eggs and milk, are under price control of marketing boards. As with wheat, this leads to Canadian processors paying slightly higher prices than their U.S. counterparts. Between 1981 to 1985, the U.S. 5-year average price for industrial milk was 97.62 percent of the Ontario price; the 5-year average price for eggs was 74.07 percent of the Ontario average price.

Labour Costs:

As discussed earlier, Canadian processors claim their total wage package is greater than U.S. counterparts, conflicting with data in Table 4.2. Additional information provided in Table 4.5 shows that for white bread, labour costs for Canadian and U.S. processors were $0.082 and $0.124/loaf ($ Cdn). Nevertheless, some support for the argument of Canadian processors can be found if the wages paid for production workers is calculated as a percent of industry shipments. Canadian costs compared to U.S. costs are:

Industry	Canada	U.S.
	- percent -	
Pasta	11.8	8.1
Bakery Products	18.7	11.5
Prepared flour mixes	10.9	7.6
Biscuit	18.4	11.5

Source: Statistics Canada - Census of Manufacturers, Cat. No. 31-203,
U.S. Department of Commerce, 1984 Annual Survey of Manufacturers.

Other Processing Costs:

Other costs of processing (transportation, energy, etc.) although not discussed, are nevertheless significant when discussing competitiveness. Their omission is due to lack of sufficient data. Using Statistics Canada data for the total industry has limited use at the product level. However, it should be noted that additional transportation and administration costs to U.S. processors if they were to enter the Canadian market offer additional protection to Canadian processors. It has been calculated that the cost to ship bread from Buffalo to Toronto is approximately 2.0 cents/16 ounce loaf. This is significant when compared to current profits of 2.0 cents/16 ounce loaf.

4.2.2 Price of Wheat Products

The examination of price aids in the analysis of competitiveness. This is difficult given that prices vary by location and company in terms of product standards and conditions of sale. It should also be remembered that prices may not necessarily cover both production costs and profit but may in fact only cover variable costs.

Nevertheless, it may be considered if tariffs offer protection for Canadian goods from U.S. goods with a price advantage due to the price of wheat in the U.S. To aid the analysis, the value of wheat in selected goods (calculated by the OWPMB) has been compared with the tariff on imports of that good in Table 4.6. Methodology for final figures is given in Appendix C.

Table 4.6: Value of Wheat in Selected Wheat-Based Products, 1986

Product	Value as % of Price[a]	Tariff
Sweet Cookies (25% flour)	1.2	5
Solid Cookies (50% flour)	2.5	5
Crackers (80% flour)	9.3	5
Cereals (100% wheat)	4.9	10

[a] Based on the equivalent of $7.00/bushel of wheat
Source: OWPMB.

Figures in Table 4.7 demonstrate the extreme variability that is found in consumer prices. Nonetheless, the majority of U.S. consumer prices are less than those paid by Canadians. Of particular note, is that even with a tariff levied the price of some American goods would appear to be lower than their Canadian counterpart. Support for this conclusion comes from a cereal industry spokesman who stated that, "U.S. imports are sold to the consumer at the retail level at prices significantly (about 30 percent) below those of Canadian national ready-to-eat (RTE) cereal brands." This demonstrates that the competitiveness of this U.S. industry extends beyond the competitive advantage of wheat costs alone. Additional price information may be found in Appendix D.

Table 4.7: Comparison of 1986 Consumer Prices of Two Selected Wheat-Based Products in Canadian Dollars

Location	Choc. Chip Cookies (350g/12 oz.)	Cereal-Shredded Wheat (675g/24 oz.)
Toronto	2.22	2.99
Buffalo	2.06	3.17
Windsor	3.77	4.95
Detroit	2.62	4.06
Montreal	2.83	3.05
Burlington, (Vt)	2.34	2.99
Vancouver	2.69	
Seattle	2.20	

Source: Coopers and Lybrand (1).

4.2.3 Profit Margins

These industries operate as high volume/low margin businesses in both Canada and the U.S., with the exception of RTE breakfast cereals. It is this characteristic that makes the cost of wheat a critical issue. Although, the value of wheat (Table 4.6) in finished goods is low, data in Table 4.8 indicate that profits as measured by net incomes as a percentage of sales are just as low. For example, an efficient Canadian processor makes 0.75 to 1 cent/loaf of white pan bread (OMAF). Thus, small changes in the price for wheat are of some significance in terms of profit.

Table 4.8: Comparison of Financial Indicators
in Selected Wheat-Using Companies in Canada and the U.S., 1986

Company	Sales or Operating Revenue	Return on Equity for 1 year	Net Income as a Percentage of Sales
	($'000 Cdn.)	(%)	(%)
Canada:			
Nabisco Brands Ltd. (Dec. 86)	941,655	9.9	3.4
Maple Leaf Mills (Dec. 86)	819,460	n/a	2.0
General Foods Inc. (Mar. 86)	740,094	21.7	3.7
Robin Hood Multifoods (Feb. 87)	399,365	15.6	3.3
General Mills Canada (Apr. 86)	235,630	11.0	3.5
Quaker Oats Co. (June 86)	243,545	16.3	5.1
Sara Lee Corp. (June 86)	302,630	10.5	3.9
Kellogg Salada Canada (Dec. 85)	244,494	n/a	1.6
Multi-Marques (Dec. 86)	225,000	n/a	n/a
Corporate Foods Ltd. (Dec. 86)	120,251	n/a	4.8
Weston Bakeries Ltd. (Dec. 85)	215,000	n/a	n/a
Average		14.1	3.6
U.S.:			
RJR Nabisco	23,457,240	n/a	6.3
Nabisco-Biscuits	2,392,920	n/a	n/a
Sara Lee	10,954,056	21.0	2.8
Pillsbury	8,070,240	16.0	3.6
General Mills	6,330,060	27.0	4.0
The Quaker Oats Co.	5,065,980	21.0	4.9
Kellogg Company	4,610,580	35.0	9.5
Intern'l Multifoods	1,869,900	11.0	1.8
McCormick	1,346,880	11.0	3.1
Interstate Bakeries	977,040	18.0	2.0
Flowers Industries	963,240	18.0	4.0
Average		19.8	4.2

4.2.4 Return on Equity

An examination of return on equity (ROE) provides further insight when assessing the competitiveness of Canadian industries as compared to their U.S. counterparts; Return on equity is measured by net income as a percentage of shareholder equity.

Analysis of the data in Table 4.8 reveals significant differences in this measure between Canadian and U.S. firms. This may be a consequence of the increased investment made by U.S. firms in technologically-advanced equipment and plant facilities that enhance revenue-generating ability. This explanation is consistent with the previous observation that U.S. firms have much higher labour productivities than their Canadian counterparts. Moreover, because U.S. firms have much larger operating revenues, capital expenditures will have less impact on their net income than the same expenditures on the income of Canadian firms with much smaller revenue bases.

The results of this analysis combined with previous information concerning productivity suggest that the low labour productivity and low ROE of Canadian firms are a consequence more of operation at sub-optimal production levels and high raw material and labour costs in low margin industries, than of the possession of technologically inferior plant facilities and equipment - the state of technology is to be discussed in the following section.

4.2.5 Adoption of New Technology and Products

This discussion concludes the analysis of the competitiveness of the aforemen- tioned Canadian industries. This area plays a key role in determining the success of a firm as measured by operating revenue and market share.

A review of the state of technology in these two countries' industries does not reveal extreme differences. In a recent report produced by the Bay Consulting Group, "Study of the Ontario Food Processing Industry", respondents from the Ontario bakery industry did not express a need for newer technologies, nor did they find it difficult to stay up-to-date.

Moreover, respondents in the Ontario prepared cereals and flour pre-mix industries perceive their plants as being comparable to international competition for efficiency and productivity. However, respondents in the biscuit industry stated that technological changes have been slow in being grasped in the industry.

Similarly, significant differences do not exist between Canadian and American companies in terms of product innovation. Most Canadian firms conduct research and development on their premises. However, where Canadian companies are subsidiaries of U.S. firms, most research and development is carried out by the U.S. parent with usually a rapid transfer of technology to Canadian subsidiaries. Moreover, U.S. companies have a market ten times that of the Canadian market in which to launch both successes and failures. In this respect, it can be argued that Canadian firms are no less innovative than U.S. firms merely cautious - launching only those products that are reasonably expected to succeed as determined from the experience of the U.S. parent or from test-marketing of their own design.

4.3 SUMMARY

The preceding discussion has reviewed the similarities and differences between the Canadian and American wheat-using industries.

Although the limitation of labour productivity at the industry level has been discussed, U.S. processors possess a distinct competitive edge, with labour productivities that range from 50 to 100 percent greater than their Canadian counterparts. Furthermore, Canadian base wage rates though appearing lower at the industry level may only hide this competitive edge of American processors. This is given that total labour costs, including fringe and social benefits, are higher in Canada than the total wage and benefit cost in the U.S. Final evidence of competitiveness was provided by the examination of plant size using value of shipments per plant. Despite claims by Canadian processors that U.S. firms possess economies of scale, a comparison of "average" plant sizes does not reveal extreme differences. As such, this reflects the contribution of high raw material and labour costs toward the value of Canadian finished goods rather than high levels of production contributing to the value of shipments per plant.

At the product level, Canadian processors seem to endure some disadvantages. Key among these is the disparity of raw material costs caused by supply management and marketing boards. Of particular note is the differential in wheat costs, resulting from the two-price wheat policy. Nonetheless, current tariffs appear to protect Canadian goods from imports whose price advantage is derived from wheat price differentials alone. Increased protection is afforded by the extra transportation and administration costs that face U.S. processors wishing to compete in the Canadian market. On the other hand, subsidies based on the wheat component of exports appear to increase the competitiveness of domestic goods in international markets. However, further analysis of product competitiveness suggests that the costs of processing, primarily the cost of wheat, is not the sole determinant of competitiveness. With regard to this, a comparison of consumer prices of two wheat based goods in various locations in Canada and the U.S. indicated that differences in prices could not be attributed only to the effect of the two-price wheat policy. Moreover, U.S. firms earned higher ROE's, likely indicating greater investment in advanced technology than their Canadian counterparts. However, in a final examination of competitiveness, Canadian and U.S. firms did not appear to differ in their adoption of new products or technology.

5. INDUSTRY VIEWS OF THE IMPLICATIONS OF FREE TRADE NEGOTIATIONS

Comments were obtained from spokespersons from both trade associations of the wheat using industries and leading Canadian manufacturers of wheat-based products, concerning their opinions of the implications of the free trade negotiations. The position of the Ontario Wheat Producers' Marketing Board was also determined.

5.1 TRADE ASSOCIATIONS

Grocery Products Manufacturers of Canada (GPMC) Task Force on Trade Policy

The Task Force voiced their opinions through a report entitled, "Impact Assessment of Trade Liberalization with the United States", October 1986 (4). Their comments though representative of all Canadian food processing sectors, apply also to the wheat using industries. Their basic views are:

1. "GPMC, Chief Executive Officers (CEOs) recognize it is important, in principle to promote opportunities for broadening the scope of Canada's international trade, especially with the United States;

2. However, the CEOs of the GPMC are virtually unanimous in recognizing fundamental obstacles to free trade in one of the largest manufacturing industries of Canada; and

3. There exists within the Canadian socio-economic fabric inherent structural impediments which currently constitute major non-tariff barriers to trade enhancement. These impediments include the cost of employee benefit packages and higher input costs for key raw materials because of supply management marketing boards."

Don Jarvis, Vice President of the GPMC and spokesman for the Task Force supplemented the Report with comments of his own. He stated that tariff removal may provide incentives for U.S. processors to enter the Canadian market. In

addition, he believes that the two-price wheat policy gives the U.S. a competitive advantage that must be eliminated.

Bakery Council of Canada

Linda Nagel, Managing Director of the Bakery Council of Canada reiterated that the two-price wheat policy prevents Canadian bakers from competing equally with their U.S. counterparts. She believed that one possible result of tariff removal with the retention of the two-price wheat policy would be for large bakers to move their operations to the United States.

Believing that import penetration is indeed a treat, the case of British Columbia was cited where 20 to 25 percent of baked goods are imported due to not only the high cost of flour but also to the high cost of union labour.

Association of Canadian Biscuit Manufacturers (ACBM)

The ACBM has prepared a submission to the Federal government, entitled, "Canada-U.S. Trade Negotiations - Implications for the Canadian Biscuit Manufacturing Sector," April 1987 (2). Their position is as follows:

> "While the Association of Canadian Biscuit Manufacturers supports in principle the governments' initiatives towards trade liberalization with the United States, we do not have an official industry position. The composition of our industry - a part of which is large scale and multinational, a part small or medium-sized and Canadian-owned, a part dealing almost exclusively in a regional market - makes it virtually impossible, to obtain a consensus on what our industry position on this very important issue should be. However, our members are unanimous in recognizing fundamental obstacles to free trade in our sector."

The following are their members' concerns and current obstacles to freer trade with the U.S.:

1. Supply/Marketing Boards i.e. wheat boards;
2. Other non-tariff barriers:
   a. Labour Rates and Benefit Costs;

b. Labelling and Packaging Regulations; and
c. Difference in Ingredient Approvals.

3. Exchange Rate Levels; and

4. Excess Capacity.

Breakfast Cereal Manufacturers of Canada

Shirley Cryderman of the Breakfast Cereal Manufacturers of Canada stated that this association has not involved itself in this issue. Their primary function is to work with the federal government concerning nutritional labelling.

5.2 CORPORATE SECTOR

Interbake Foods Inc.

Stan Sumsion, Secretary-Treasurer of Interbake - although supporting free trade initiatives, stated that there are problems to be solved, in particular, marketing boards (egg and wheat). He cited that lower input cost in the U.S. allows for a less expensive finished good.

Nabisco Brands

Ed Korhonen, V.P. of Nabisco Brands - that position of Nabisco Brands has been summarized by the GPMC Task Force on Trade. Again, it was pointed out that tariffs only just offset wheat price differentials.

5.3 ONTARIO WHEAT PRODUCERS' MARKETING BOARD

The Ontario Wheat Producers' Marketing Board stated their views in a position paper of May 28, 1987 (5). Their views may be summarized as:

1. The Two-Price Wheat Policy in Canada has been of paramount importance to producers in offsetting depressed export prices which apply to the remaining 75 percent of production.

2. If the Two-Price Wheat Policy is abolished it is questionable if product costs would automatically reduce to the benefit of domestic consumers and the manufacture exported.

3. Until such time as the major wheat exporting countries are able to construct production and marketing systems which place producers on equal terms there can be no "sell out" of Canada's traditional marketing mechanisms including marketing boards and domestic price policies, particularly those applicable to Ontario wheat.

5.4 SUMMARY

In the preceding section, two views are distinguished clearly. Spokespersons for the Canadian food processing industry believe that the two-price wheat policy does not allow them to compete equally with their counterparts in the U.S. Tariffs, though of limited use, are viewed as some measure of protection from cost differences due to the wheat component of the finished product. In contrast, the OWPMB states that as the cost for wheat is a minor component of the price for the finished good, any savings from the removal of the two-price wheat policy would not be passed on to the consumer.

6. IMPLICATIONS OF FREE TRADE

This section discusses the implications of free trade in the context of removal of tariffs and dismantling of the two-price wheat policy using information discussed in the previous sections. The implications will be discussed with reference to the Canadian scene, rather than narrowly focussing on Ontario. This may be done as Ontario dominates all sectors of Canadian industry. A study of the impact of this scenario will be followed by a discussion of possible strategies to be implemented by producers and processors.

6.1 IMPACT OF REMOVAL OF TARIFFS AND THE TWO-PRICE WHEAT POLICY

This discussion assesses the impact of the removal of tariffs and the two-price wheat policy. Several assumptions were made to aid in the analysis. They include:

1. Elimination of tariffs on all wheat-based products, including wheat;

2. Elimination of the two-price wheat policy with additional adjustments to Canadian transportation assistance and stabilization payments so that the benefits are equivalent to those under the U.S. price support system;

3. Retention of the Canadian Wheat Board and the Ontario Wheat Producers' Marketing Board; and

4. Standardization of labelling, packaging and ingredient regulations (non-tariff barriers).

The impact on retail price of wheat products, costs of production, Canadian industry shipments, industry adjustments and wheat producers will be reviewed.

6.1.1 Price of Wheat Products

Imports of American biscuits, prepared cereal foods, other cereal grain products and bakery products (NES) enter Canada facing tariff duties of 5, 7.5, 10 and 15.5 percent respectively (Table 3.1). As noted earlier, Canadian tariffs act as an additional cost for imports.

Furthermore, data in Table 4.5 indicated that current Canadian tariffs only cover the differential caused by higher priced wheat with the exception of crackers. Thus, tariff removal could have serious implications for Canadian food processors, likely resulting in lower retail prices in Canada for these products. Specifically, American processors becoming more price competitive may aggressively target highly populated Canadian centres. Nevertheless, Canadian processors may be able to respond to this pressure given that some cost savings will be realized with the dismantling of the two-price wheat policy.

Less impact on the prices in the bread/rolls and pasta sectors is expected given that both products currently enter Canada free of duty, and that U.S. goods make up less than 20 percent of Canadian imports of pasta products.

6.1.2 Costs of Production for Wheat Using Food Processors

Potential competition between domestic and foreign goods as a result of removal of the two-price wheat policy and tariffs may necessitate the review and reduction of costs by domestic processors.

Costs of Raw Materials:

As noted in Table 4.2, wheat represents 20 to 85 percent of raw material costs for the products under consideration. Thus, if domestic users are allowed to purchase wheat or wheat in the form of flour at prices closer to the U.S. price of $3.76 Cdn/bushel* rather than at the Canadian price of $7.00/bushel, significant savings may result. Exact savings at the processing level are difficult to estimate given that wheat passes through middlemen before reaching the end users. However, an estimate of savings to each of the four industries resulting from the two-price wheat policy has been made using 1984 usage of wheat or wheat flour and the differential of $3.24 between current costs for wheat in the U.S. and Canada as a basis.

---

* The September futures price on U.S. hard wheat closed on July 10, 1987, Chicago @ $2.72 U.S. per bushel or $3.76 Cdn per bushel.

The following wheat-flour relationship will be employed to first determine savings in the Canadian bread and other bakery products industries:

Quantity Relationship:

* 1984 wheat flour use in the bakery industry = 510.8×10^3 tonnes
* 1 tonne wheat = 0.74 tonne of wheat flour
* 36.744 bushels of wheat = 1 tonne of wheat
* 1984 wheat flour use = 25.363×10^6 bushels

Price Relationship:

* Canadian Wheat Price = \$7.00/bushel
* U.S. Wheat Price = \$3.76 (Cdn)/bushel
* Savings for Bakery Industry = $25.363 \times 10^6 \times \$(7.00 - 3.76)$
  = \$82.176 million

Given that in 1984, total costs for wheat flour for this industry amounted to \$208.0 million, potential savings are significant.

Following similar methodology, the potential savings to the three other Canadian industries of interest was determined using their 1984 consumption of wheat or wheat flour as shown in Table 6.1.

Table 6.1: Cost Savings of Dismantling the Two-Price Wheat Policy in Selected Canadian Wheat-Using Industries

Canadian Industry	Wheat or Wheat Flour Consumption, 1984	Savings if Price of Wheat Declines to \$3.76/bushel
Bread and Bakery Product	510.8×10^3 tonnes of wheat flour	\$82.176 million
Biscuit	104.7×10^3 tonnes of wheat flour	\$16.844 million
Pasta	125.5×10^3 tonnes of wheat flour	\$20.191 million
Prepared Flour Mixes and Breakfast Cereals	33.1×10^3 tonnes of wheat and 53.7×10^3 tonnes of wheat flour	\$12.580 million
TOTAL		\$131.791 million

Source: Statistics Canada, Cat. No.'s 32-202, 32-203, 32-2248 and 32-228.

These potential savings amount to $131.791 million or roughly 31.96 percent and 12.66 percent of the cost for wheat and wheat flour, and cost for raw materials and supplies respectively.

Closer attention should be paid to individual products within the broad industry categories so that savings may be compared with existing tariff protection. Again, these crude estimates are made using previous methodology together with estimates of flour used in their manufacture (Table 6.2).

Table 6.2: Cost Savings of Dismantling the Two-Price Wheat Policy to Selected Wheat-Based Products, Canada

Product and Quantity Produced in Canada (1984)	Wheat or Wheat Flour Consumption (1984)	Savings if Price of Wheat Declines to $3.76/bushel
Bread - 559 601 tonnes	373.1 x 10^3 tonnes of wheat flour[a]	$60.31 million
Rolls - 113 767 tonnes	68.3 x 10^3 tonnes of wheat flour[b]	$10.99 million
Bakery Products	68.7 x 10^3 tonnes[c] of wheat flour	$11.05 million
Biscuits - 146 422 tonnes	43.9 x 10^3 tonnes of wheat flour[d]	$ 7.06 million
Crackers - 29 915 tonnes	23.9 x 10^3 tonnes of wheat flour[e]	$ 3.85 million

[a] Based on a flour content of 67 percent
[b] Based on a flour content of 60 percent
[c] Based on flour use of bakery industry minus flour used in the manufacture of bread and rolls
[d] Based on a flour content of 30 percent
[e] Based on a flour content of 80 percent

Source: Statistics Canada, OWPMB, Cat. No.'s 32-202, 32-203, 32-224 and 32-228.

Focussing upon white pan bread allows one to illustrate potential savings at the product level more accurately. Using the previous wheat-flour-bread relationship (p.18), the potential impact of dismantling the two-price wheat policy on the value of wheat per loaf in Canada is:

Loaf Size	Value	
	$3.76/bushel	$7.00/bushel
24 oz loaf	8.6 cents	16.1 cents
16 oz loaf	5.8 cents	10.7 cents

These savings in wheat costs and their impact on total production costs (Table 4.5) are shown in Table 6.3.

Table 6.3: Comparison of Costs of Production for 16 oz loaf if Ontario Bakers Purchase Wheat in the Form of Flour at the U.S. Price

Cost Component	U.S. Costs (Wheat @ $3.76/bushel)	Ontario Costs (Wheat @ $3.76/bushel)	Ontario Costs (Wheat @ $7.00/bushel)
Ingredient	0.160	0.140	0.215
Packaging	0.028	0.024	0.024
Labour	0.124	0.082	0.082
Other	0.053	0.057	0.057
TOTAL	0.365	0.303	0.378

As noted earlier, savings in production costs may be exaggerated, given that millers may not pass the full benefit of cheaper wheat onto Canadian bakers.

Other Costs of Production:

As noted earlier, Canadian processors possess serious disadvantages in terms of industry and product competitiveness. Analysis of labour productivity may raise serious doubts concerning the efficiency of Canadian production. In this respect, there may be more incentives for Canadian manufacturers in these industries to improve labour productivity. In addition, the total wage package for workers is seen as a liability for Canadian processors. Furthermore, with access to a domestic market that is ten times the size of the Canadian market, U.S. processors may be

able to take advantage of valuable economies of scale. Consequently, Canadian processors are severely limited to the extent that efficiency may be improved or costs of production reduced solely through reductions in domestic wheat prices.

6.1.3 Canadian Industry Shipments

Industry shipments have enjoyed limited growth resulting from an increase in domestic consumption, specifically, in the bakery, pasta, cereal products sectors. This has been prompted by a growing awareness of health and nutrition. Perhaps of more importance when assessing the future of Canadian shipments of wheat based goods is the analysis of future imports and exports. To facilitate the analysis, current protection offered by Canadian tariffs on U.S. imports should be compared to savings to industries and products resulting from the dismantling of the two-price wheat policy. Savings will be presented as a percentage of the value of shipments.

Table 6.4: Comparison of Tariff Protection and Savings Resulting from Dismantling the Two-Price Wheat Policy

Industry and/or Product	Canadian Tariff on U.S. Goods	Savings[a] as % of Value of Shipments[b]
Bread & Bakery	6.1	
Bread	Free	9.0
Rolls	Free	6.1
Bakery Products	15.5%	2.3
Biscuits	5.0%	3.5
Biscuits	5.0%	1.6
Crackers	5.0%	5.3
Prepared Flour Mixes and Breakfast Cereals	7.5 - 10.0%	2.9
Pasta	Free	13.5

[a] Savings from Tables 6.1 and 6.2.
[b] Statistics Canada, Cat. No.'s 32-203, 32-202, 32-224, and 32-228.

Imports:

Current imports of biscuits, breakfast cereals, other cereal grain products, and bakery products (NES), most having originated from the U.S., have achieved substantial market share despite tariff protection (Table 3.1). Thus, dismantling tariffs may allow these imports, valued at $146 million in 1986, to further increase market share at the expense of domestic shipments. Nevertheless, dismantling of the two-price wheat policy has the potential to control the growth of imports if decreases in the cost of wheat for domestic processors are passed on to the consumer in the price of domestic goods. However, as shown in Table 6.4, tariff protection appears greater than the gain from the removal of the two-price wheat policy; as such the Canadian industries may be in a somewhat worse position than previously.

However, of note is that key U.S. manufacturers of the aforementioned products are actually the parent companies of Canadian counterparts (Appendix E). As such, it is unlikely that these companies would attempt to gain market share at the expense of Canadian subsidiaries. Furthermore, it is uncertain if smaller American companies without Canadian ties have the ability to compete with Canadian companies in terms of costs of production.

U.S. imports of bread/rolls currently enjoy duty-free status. General tariff removal will not as such encourage import growth in these products which also are restricted by perishability and low profitability. Moreover, dismantling of the two-price wheat policy may be of most advantage to these processors operating without the benefit of tariff protection. Savings realized from dismantling the two-price wheat policy rather than being needed to counteract the loss of tariffs as in the other industries of concern, may instead allow domestic goods to become more competitive and displace imports (Table 6.4).

Although pasta imports do contribute significantly to domestic supply, it is subsidized imports from Italy rather than American goods that are the concern domestically. For this reason, the gains from dismantling the two-price wheat policy may not change the competitive position of domestic goods as compared to imports.

Exports:

The importance of exports to domestic processors has been already discussed. Because Canadian goods, except for prepared cereal foods and cereal grain products, enter the U.S. free of duty, free trade negotiations will have minimal effects on export trade.

Perhaps of more importance when considering exports is that U.S. parent companies will not allow Canadian subsidiaries to export if it conflicts with the territory of the parent or of another subsidiary. Additionally, it must be remembered that Canadian manufacturers are receiving a reimbursement for the component of wheat in their exports; this may be lost under a free trade agreement.

6.1.4 Industry Adjustments

Besides the re-evaluation of production costs, significant effects of "free trade" are dependent upon future trade patterns as discussed in the preceding section. One, if imports increase their share of the market at the expense of domestic processors, subsequent job loss may result. On the other hand if domestic processors are able to displace imports, there is the potential for expansion of production facilities, leading to increased employment opportunities. Further- more, removal of the two-price wheat policy lessens the possibility of plant relocation.

Of final note is that a free trade agreement may prompt Canadian wheat-using processors to evaluate current marketing schemes; such possible strategic moves are discussed in Section 6.2.1.

6.1.5 Impact on Domestic Wheat Producers

To reiterate, the OWPMB stated in their position paper that, "the two-price wheat policy in Canada has been of paramount importance to producers in offsetting depressed export prices which apply to the remaining 75 percent of production (Ontario)."

According to the Malone Committee report (5), the five-year average annual Canadian production of wheat from 1980-1981 to 1984-1985 was 23.71 million tonnes, of which 0.71-0.95 million tonnes (3-4 percent) was Ontario production. Furthermore, of Canadian wheat production, the Malone Committee reports that a five-year average of 8.2 percent or 1.94 million tonnes were used for Canadian domestic human consumption. In Ontario, the OWPMB reports that approximately 250 000 tonnes of wheat were used for domestic human consumption. Using the five year average figures for Canadian production and consumption, an estimate of the potential losses to Canadian farmers with the dismantling of the two-price wheat policy is as follows:

* 5 year avg. annual Canadian production	= 23.71 million tonnes
* Domestic consumption, approx.	= 8.2 percent
* 5 year avg. annual Cdn domestic consumption	= 1.94 million tonnes 71.44 million bushels
* Loss/bushel = $(7.00 - 3.76)	= $3.24
* Total Loss = $3.24 x 71.44 million bushels	= $231.46 million

Repeating the calculations for Ontario farmers, gives a potential loss of $29.763 million as shown below.

* 1985 domestic human consumption of Ont. production	= 0.25 million tonnes = 9.19 million bushels
* Loss/bushel = $(7.00 - 3.76)	= $3.24
* Total Loss = $3.24 x 9.19 million	= $29.78 million

Given that 1986 farm cash receipts for wheat were $2,822 million and $119 million for Canadian and Ontario farmers respectively and $3,071 million and $136 million in 1985, losses are significant.

This may be contrasted to the previous estimate of $131.791 million for potential savings in the four industries in Canada under consideration. The differences come from the fact that the former figure includes all domestic wheat consump- tion, including use for the manufacture of household flour and wheat used in other food processing industries, which would receive savings of approximately $100 million.

6.2 STRATEGIES FOR PROCESSORS AND PRODUCERS

6.2.1 Wheat-Using Processors

Dismantling of the two-price wheat policy and tariffs may act as impetus for food processors to implement the following strategies:

1. A move toward specialized, high-value added products - in order to capture niches in the U.S. market. In the bakery products sector, products such as pies, cakes, and pastries have already proven successful in penetrating the U.S. market. In addition, these products possess the high margins that are necessary to offset higher distribution and administration costs.

2. Sophistication of marketing techniques - in particular the application of "packaged goods" marketing. According to the Bay Consulting Group report, firms in the bakery products industry approach marketing in the traditional way, without the benefit of good market research and the well-developed market analysis tools that are used by sophisticated consumer packaged goods companies. This observation may also apply to the other wheat using industries.

3. Increased investment in equipment and plant facilities in order to improve labour productivity and efficiency, although this group of Canadian processors claim that they are technologically comparable to industries in other countries. Given the significant differences in market sizes, Canadian processors may be forced not only to remain up-to-date but in fact to adopt state-of-the-art technology such as robotics, computerized process control, etc. As stated earlier, processors will be forced to re-evaluate production costs together with the rationalization of some facilities to improve efficiency and labour productivity.

4. Development of specialized products, in response to demands of the domestic market. Some of the key opportunities for specific industry sectors are detailed below.

   * Two opportunities in the bakery industry are the <u>development of the frozen dough market</u> - a market experiencing rapid growth at the wholesale level, and the <u>extension of product shelf life</u> to not only make the product more

attractive to the domestic market, but also to improve the opportunity to sell into export markets.

* In the pasta industry, development of the fresh pasta market which has recently expanded presents an opportunity.
* In the cereal industry, opportunities exist in convenience products, particularly RTE, and in additive-free and fibre-rich items.
* In the flour pre-mix industry, increased marketing of product mixes may be undertaken. This strategy recognizes the importance that mixes are realizing in the industrial bakeries, food service and retail markets. The first market includes in-store bakery market, a market experiencing rapid growth.

5. A final strategy available to these industries is to price cut in the domestic market in order to compete with, and perhaps displace imports no longer facing the additional costs of tariffs. This strategy is feasible given the potential savings that are realized with the dismantling of the two-price wheat policy. The bakery and pasta industries, currently operating without tariff protection will realize the greatest benefits from this.

All of the preceding strategies are feasible for Canadian processors as they have been implemented by or received attention from their U.S. counterparts.

6.2.2 Canadian Wheat Producers

Faced with declining receipts from wheat, the two most important and in fact contrasting strategies available to wheat growers could be:

1. To reduce production in response to lower prices; and
2. To engage in an aggressive marketing campaign to enhance the image of wheat products and hence increase domestic consumption.

As such the latter suggestion is to be implemented by the Western Canada Wheat Growers Association in the form of a $200,000 marketing campaign this month (August 1987). This effort is hoped to reverse the trend of declining consumption in Canada - contrasting with the increased consumption of wheat products in the U.S. and Europe.

7. SUMMARY AND CONCLUSIONS

Canada and the United States are in engaged in trade negotiations to achieve a broad package of mutually beneficial trade barrier reductions. Discussions, beginning in May, 1986, are hoped to be concluded by the fall of 1987. These negotiations are aiming to achieve a settlement removing tariff barriers non-tariff barriers (e.g. quotas, health and disease regulations, product standards, etc.).

This paper assesses the implications of tariff removal on Canada's food processing industries that use wheat in the form of flour as their primary raw material, excluding flour milling. The industries under consideration include: 1) bread and other bakery products; 2) biscuits; 3) prepared flour mixes and prepared cereal foods, excluding flour; and 4) pasta.

In 1984, these industries produced shipments valued at $2,417.9 million (7.6 percent of Canadian food shipments) and they employed 20,537 production workers (15.8 percent of Canadian workers). Of this, Ontario produced shipments worth $1,207.2 million and employed 9,532 production workers. Together these processors use 8-9 percent of the 23.71 million tonnes of wheat (average annual production 1980-85) marketed through the CWB and 25 percent of the 1 million tonnes of wheat marketed through the OWPMB. Since 1980, Canadian wheat users have been forced to pay significantly higher prices for wheat than their U.S. counterparts - critical in these high volume/low margin businesses.

The impetus for this study has been provided by the probable outcome of trade negotiations, leading to the removal of both tariffs and the two-price wheat policy. Previously, the Grocery Products Manufacturers of Canada (GPMC) had claimed that wheat-using industries would be adversely affected if tariffs were removed but the two-price wheat policy retained. In contrast, the Canadian Wheat Board (CWB) and the Ontario Wheat Producers' Marketing Board (OWPMB) argue that as the cost of wheat in the finished good is a minor component of cost, the two-price wheat system should be retained.

Government policies have had a profound effect in terms of input cost and availability and product marketing, through the use of marketing boards and tariffs respectively. The loan rate which is essentially the U.S. market price for wheat as the world price is lower than this, is substantially less than the price Canadian processors must pay for domestic wheat purchased through the Canadian Wheat Board and the Ontario Wheat Producers' Marketing Board. Canadian processors feel somewhat compensated for their lack of competitiveness, resulting from the two-price wheat policy, by both tariffs on wheat-based goods entering Canada and reimbursements to Canadian processors exporting wheat-based goods.

Trade in these goods was examined, though it should be noted that trade is limited due to product characteristics of perishability and low margins. It was found that Canadian processors place greater reliance on export markets than their U.S. counterparts. However, the penetration of imports in the Canadian market cannot be ignored especially, as they were greater than exports, $174 million versus $171 million in 1986. Of particular note, is that imports had an annual growth rate of 25.6 percent versus a 19.6 percent annual growth rate for exports from 1980 to 1986. The fact that the United States is the market destination for greater than 90 percent of our exports and is the provider of greater than 90 percent of our imports places importance on the Canada-U.S. trade negotiations. Unlike Canada, Ontario possesses a positive trade balance but with annual growth rates of imports and exports in dollars of 27.2 percent and 22.4 percent respectively. However, similar to the aggregate of the Canadian wheat-based industries, the U.S. plays a prominent role in Ontario's trade.

Upon examination of industry competitiveness, difference in labour productivity are most significant, suggesting that raw material costs are not alone in influencing the competitiveness of the Canadian wheat-using industries. At the product level, input cost disparities caused by the two-price wheat policy and other marketing and supply management boards are most evident. Although not ameliorating Canada's general lack of competitiveness, tariffs and export subsidies appear to compensate solely for those disparities caused by the two-price wheat policy.

Comments from Canadian industry spokespersons contrasted sharply with those of the wheat marketing boards. Though supportive of free trade initiatives, food processors were united in their belief that the two-price wheat policy and other domestic marketing agencies seriously impede their ability to compete with their counterparts in the U.S. In contrast, the marketing boards say that higher input costs are minor in the price of the finished good.

The implications of trade negotiations leading to removal of tariffs and the two-price wheat policy were assessed in terms of impact and possible strategies undertaken by both producers and processors.

Under this scenario, the impact could involve: 1) decline in consumer prices of wheat based products with the possible exception of pasta products in large Canadian urban centres; 2) increased import penetration but tempered if domestic goods become more price competitive with the removal of the two-price wheat policy; 3) reductions in the cost of production from lower raw material costs; 4) the possibility of either a) job loss from increased import penetration or b) increased employment opportunities from the expansion of production facilities as a result of increased competitiveness of domestic goods in the Canadian market; and 5) significant decreases in farm cash receipts for wheat - $30 and $230 million for Ontario and Canadian wheat producers, respectively.

Possible strategies for Canadian wheat-using processors could be to: 1) move toward specialized, high-value added products - in order to capture niches in the U.S. market; 2) improve the sophistication of marketing techniques - in particular the application of "packaged goods" marketing; 3) increase investment in equipment and plant facilities in order to improve labour productivity and efficiency; and 4) develop specialized products, in response to demands of the domestic market; and 5) reduce prices in the domestic market in order to compete with imports, and perhaps displace them. Options for domestic wheat producers are: 1) to reduce production in response to lower prices; and 2) to engage in an aggressive marketing campaign to enhance the image of wheat products and hence increase domestic consumption.

REFERENCES

1. Coopers Lybrand Consulting Group, "Report to GPMC Wheat Users Task Force", April 1986.

2. Canadian Association of Biscuit Manufacturers, "Canada - U.S. Trade Negotiations -- Implications for the Canadian Biscuit Manufacturing Sector", April 1987.

3. John Labatt Limited, "Bilateral Free Trade and the Food Processing Industry - A Brief to the Government of Canada", 1987.

4. Grocery Products Manufacturers of Canada, "Impact Assessment of Trade Liberalization With The United States", October, 1986.

5. Ontario Wheat Producers' Marketing Board, "Ontario Wheat Board Position on Free Trade", May 1987.

6. House of Commons Special Committee, "The Pricing of Domestic Wheat", Chairman Arnold Malone, May 1986.

APPENDIX A

TABLES OF PRINCIPAL STATISTICS ON THE WHEAT-USING INDUSTRIES

Table A.1: Principal Statistics of Bread and Bakery Products Industry, 1982-1984, in Canadian Dollars

Location	1982	1983	1984	Annual Change (%)
Canada				
Establishments (no.)	555	493	485	(6.3)
Production Workers (no.)	13,518	13,266	13,210	(1.1)
Value of Shipments ($/million)	1,280	1,275.8	1,340.9	2.4
Value Added ($/million)	707.3	705.1	743.4	2.6
Ontario				
Establishments (no.)	n/a	151	140	(7.3)
Production Workers (no.)	n/a	5,048	5,009	(0.8)
Value of Shipments ($/million)	n/a	458	494	7.9
Value Added ($/million)	n/a	234	257	9.8
U.S.				
Establishments (no.)	2,305	n/a	n/a	-
Production Workers (no.)	88,900	85,200	84,800	(4.6)
Value of Shipments ($/million)	16,220	16,383	17,741.3	4.7
Value Added ($/million)	9,701.4	9,884.0	10,753.1	5.4

n/a - not available.

Table A.2: Principal Statistics of Biscuit Industry, 1982-1984, in Canadian Dollars

Location	1982	1983	1984	Annual Change (%)
Canada				
Establishments (no.)	28	27	30	3.6
Production Workers (no.)	4,428	4,486	4,503	0.8
Value of Shipments ($/million)	427	454	489	7.3
Value Added ($/million)	225	251	268	9.5
Ontario				
Establishments (no.)	n/a	14	15	7.1
Production Workers (no.)	n/a	2,421	2,475	2.2
Value of Shipments ($/million)	n/a	224	256	14.3
Value Added ($/million)	n/a	116	134	15.5
U.S.				
Establishments (no.)	358	n/a	n/a	-
Production Workers (no.)	35,000	34,700	36,000	1.4
Value of Shipments ($/million)	5,757.0	6,056.0	7,361.2	11.2
Value Added ($/million)	3,442.3	3,683.4	4,481.2	15.1

n/a - not available.

Table A.3: Principal Statistics of Prepared Flour Mixes and Cereal Foods Industry, 1982-1984, in Canadian Dollars

Location	1982	1983	1984	Annual Change (%)
Canada				
Establishments (no.)	19	20	19	0.0
Production Workers (no.)	1,853	1,824	1,880	1.2
Value of Shipments ($/million)	421.0	440.9	437.4	1.9
Value Added ($/million)	237.8	256.1	243.9	1.3
Ontario				
Establishments (no.)	n/a	10	10	0.0
Production Workers (no.)	n/a	1,560	1,638	5.0
Value of Shipments ($/million)	n/a	380.0	378.3	(0.4)
Value Added ($/million)	n/a	224.5	214.0	(4.7)
U.S.				
Establishments (no.)	111	n/a	n/a	-
Production Workers (no.)	17,600	18,200	18,200	1.7
Value of Shipments ($/million)	1,751.3	7,530.2	8,995.9	10.7
Value Added ($/million)	751.8	4559.3	3242.7	24.1

n/a - not available.

Table A.4: Principal Statistics of Pasta Industry, 1982-1984 in Canadian Dollars

Location	1982	1983	1984	Annual Change (%)
Canada				
Establishments (no.)	20	30	28	20
Production Workers (no.)	853	899	944	5.3
Value of Shipments ($/million)	154.3	154.2	149.8	(1.5)
Value Added ($ million)	67.9	66.7	63.0	(3.6)
Ontario				
Establishments (no.)	n/a	12	10	(16.7)
Production Workers (no.)	n/a	424	410	(3.3)
Value of Shipments ($/million)	n/a	84.2	78.7	(6.5)
Value Added ($/million)	n/a	41.0	35.5	(13.4)
U.S.				
Establishments (no.)	n/a	n/a	n/a	-
Production Workers (no.)	n/a	5,600	5,500	(1.8)
Value of Shipments ($/million)	1,314.3	1,350.0	1,401.4	3.4
Value Added ($/million)	n/a	719.6	749.4	4.0

n/a - not available.

APPENDIX B

TABLES OF TRADE STATISTICS ON THE WHEAT-USING INDUSTRIES

Table B.1: Value of Trade By Commodity, 1980-1986

	1980	1981	1982	1983	1984	1985	1986	Avg. Annual % Change 1980-1986
				- $'000 -				
Imports								
Biscuit, except soda biscuits	21,032	22,841	27,203	30,026	40,801	45,984	49,960	22.9
Bakery products n.e.s.*	19,889	24,040	26,772	32,770	33,440	37,723	42,286	18.8
Bread except Passover, rolls & buns unsweetened	4,002	5,631	6,014	6,054	8,441	8,559	8,333	18.0
Rolls & buns unsweetened	1,017	1,851	1,835	3,692	2,224	3,095	1,482	7.6
Macaroni products	8,684	11,179	11,028	13,022	15,873	15,881	18,034	17.9
Breakfast cereal foods	3,874	5,628	15,544	17,977	21,981	11,547	14,107	44.0
Cereal grain products n.e.s.*	15,186	16,282	15,610	25,683	47,916	36,991	39,882	27.1
TOTAL IMPORTS	68,665	79,970	96,157	119,478	160,011	148,126	174,084	25.6
Exports								
Biscuit, except soda biscuits	21,469	21,851	25,137	31,715	39,371	54,114	61,536	31.1
Bakery products n.e.s.*	36,128	36,361	38,027	41,425	45,199	50,217	57,464	9.8
Bread, rolls & buns except sweet goods	1,402	2,831	9,502	10,795	11,495	12,692	15,527	167.9
Macaroni products	14,632	16,615	15,236	14,921	14,689	15,870	16,070	1.6
Breakfast cereal foods	4,261	5,289	6,302	5,161	5,963	6,293	13,533	36.3
Cereal grain products n.e.s.*	2,257	3,325	4,235	3,174	4,641	4,071	7,240	36.8
TOTAL EXPORTS	78,747	83,411	88,937	96,396	109,863	130,565	171,370	19.6

n.e.s.* Not elsewhere specified
( ) Indicates decline or deficit

Note: BAKERY PRODUCTS n.e.s. includes such items as soda biscuits, bread crumbs, bread sticks, cheese sticks, ice cream cones, etc.

CEREAL GRAIN PRODUCTS n.e.s. includes items such as cake mixes, corn sticks, pancake mix, pie crust mix, pizza mix, minute rice.

Source: Statistics Canada: Exports Merchandise Trade, Annual, Cat. No. 65-202;
Imports, Merchandise Trade, Annual, Cat. No. 65-203
Exports by Commodities, December 1985, Cat. No. 65-004;
Imports by Commodities, December 1985, Cat. No. 65-007; and
Bread and Rolls detail for imports from the Trade Section.

Table B.2: Volume of Trade By Commodity, 1980-1986

	1980	1981	1982	1983	1984	1985	1986	Avg. Annual % Change 1980-1986
				- '000 kg -				
Imports								
Biscuit, except soda biscuits	8,581	8,969	10,209	12,483	16,820	19,420	18,348	18.9
Bakery Products n.e.s.*	14,708	18,125	18,664	23,762	21,753	22,963	24,855	11.5
Bread except Passover, rolls & buns unsweetened	4,054	5,912	6,128	6,722	8,176	7,387	7,206	13.0
Rolls & buns Unsweetened	1,897	3,156	2,635	5,365	2,061	2,382	1,215	(6.0)
Macaroni products	7,167	10,205	9,409	12,270	15,837	15,787	17,049	23.0
Breakfast cereal foods	1,895	2,913	5,995	6,634	8,269	7,263	8,144	55.0
Cereal grain products n.e.s.*	9,857	9,156	7,863	10,318	15,188	14,540	15,380	9.3
TOTAL IMPORTS	42,208	49,368	52,140	65,467	77,797	79,973	92,197	19.7
Exports								
Bisc. & Cook., except soda bisc. ...	12,000	10,499	11,147	14,951	18,023	22,359	25,667.71	19.0
Bakery products n.e.s.*	36,123	32,683	30,664	32,565	32,304	33,413	38,154	0.9
Bread rolls & buns except sweet goods	1,595	1,702	3,935	5,451	5,731	5,668	6,870	55.1
Macaroni products	14,962	14,602	13,445	13,316	12,096	12,470	13,351	1.8
Breakfast cereal foods	3,731	3,823	4,224	3,538	3,849	3,986	6,746	13.5
Cereal grain products n.e.s.*	1,998	2,378	3,006	2,142	3,774	3,358	5,452	28.8
TOTAL EXPORTS	68,914	63,985	62,486	66,512	70,046	75,586	86,312	14.2

n.e.s.* Not elsewhere specified
( ) Indicates decline or deficit

Note: BAKERY PRODUCTS n.e.s. includes such items as soda biscuits, bread crumbs, bread sticks, cheese sticks, ice cream cones, etc.

CEREAL GRAIN PRODUCTS n.e.s. includes items such as cake mixes, corn sticks, pancake mix, pie crust mix, pizza mix, minute rice.

Source: Statistics Canada: Exports Merchandise Trade, Annual, Cat. No. 65-202;
Imports, Merchandise Trade, Annual, Cat. No. 65-203
Exports by Commodities, December 1985, Cat. No. 65-004;
Imports by Commodities, December 1985, Cat. No. 65-007; and
Bread and Rolls detail for imports from the Trade Section.

Table 8.3 - Canada's Major Trading Partners in Flour Based Products
Canada, 1986

	Exports	'000 kg		Imports	'000 kg
1.	Biscuits/Cookies		1.	Biscuits/Cookies	
	U.S	24287.30		U.S.	5111.06
	Puerto Rico	167.28		U.K.	5176.61
	Trinidad-Tobago	71.56		Denmark	1992.11
	Total	25667.7		Total	18348
2.	Bakery Products n.e.s.		2.	Bakery Products n.e.s.	
	U.S.	24505.58		U.S.	20196.06
	Norway	212.70		W. Germany	1600.02
	U.K.	237.84		U.K.	818.71
	Total	38154		Total	24855
3.	Macaroni Products		3.	Macaroni Products	
	U.S.	12703.04		Italy	8391.20
	U.K.	70.97		U.S.	3168.33
	Leeward/Windward Is. ...	258.55		Hong Kong	1564.97
	Total	13351		Total	17049
4.	Breakfast Cereal Foods		4.	Breakfast Cereal Foods	
	U.S.	5588.93		U.S.	8122.34
	Trin.-Tobago	421.32		Switzerland	19.38
	Barbados	270.44		U.K.	1.87
	Total	6746		Total	8144

Source: Statistics Canada: Cat. No.'s 65-202, 65-203, 65-004, & 65-007

Table B.4 - Importance of Ontario Trade to Canada's Trade, 1986

Product	Ontario as % Canada	
	Imports	Exports
Biscuits, except soda biscuits	61.65	95.17
Bakery Products	52.70	57.54
Bread & rolls unsweetened	28.9	91.32
Macaroni	51.19	92.68
Breakfast Cereals	69.68	92.12
Cereal Grain Products	61.30	86.09

Source: Statistics Canada, Cat. No.'s 65-202, 65-203, 65-004, & 65-007

Table B.5: Volume of Trade by Commodity, Ontario, 1980-1986

	1980	1981	1982	1983	1984	1985	1986	%
				- '000 kg -				
Imports								
Biscuits, except soda biscuits	5345	5695	6956	8724	12044	12863	11705	19.8
Bakery products n.e.s.*	5794	5294	5475	6539	7874	9691	11924	17.6
Bread except Passover, rolls	N/A	N/A	N/A	N/A	N/A	1007	1327	31.8[a]
Rolls & buns unsweetened	N/A	N/A	N/A	N/A	N/A	1003	554	(44.8)[a]
Macaroni products	2936	4466	4771	6772	8931	8132	8749	33.0
Breakfast cereal foods	1165	1972	4082	4611	5905	4980	5475	61.7
Cereal grain products n.e.s.*	5872	5384	8595	5741	8539	8351	8862	8.5
TOTAL IMPORTS	21112	22811	29879	32387	43293	44017	47615	20.2
- except bread rolls								
[a] % change 85-86								
Exports								
Biscuits, except soda biscuits	10400	9086	10086	13471	16617	20222	23786	2.15
Bakery products n.e.s.*	29803	26278	23553	24845	24486	24585	29730	N/A
Bread, rolls & buns	1293	1445	3376	4975	5362	5101	6275	64.2
Macaroni products	11011	11677	11423	11315	11133	11353	12393	2.1
Breakfast cereal foods	2748	3020	3668	3058	3143	3408	6281	21.4
Cereal grain products n.e.s.*	1716	1998	1854	1243	2494	2681	4700	28.9
TOTAL EXPORTS	56971	53504	53960	58907	63235	67350	83165	7.7

n.e.s.* Not elsewhere specified
N/A Not Available
( ) Indicates decline or deficit

Note: BAKERY PRODUCTS n.e.s. includes such items as soda biscuits, bread crumbs, bread sticks, cheese sticks, ice cream cones, etc.

CEREAL GRAIN PRODUCTS n.e.s. includes items such as cake mixes, corn sticks, pancake mix, pie crust mix, pizza mix, minute rice.

Source: Statistics Canada: Exports Merchandise Trade, Annual, Cat. No. 65-202;
Imports, Merchandise Trade, Annual, Cat. No. 65-203
Exports by Commodities, December 1985, Cat. No. 65-004;
Imports by Commodities, December 1985, Cat. No. 65-007; and
Bread and Rolls detail for imports from the Trade Section.

Table B.6: Value of Trade by Commodity, Ontario, 1980-1986

	1980	1981	1982	1983	1984	1985	1986	%
				- $'000 -				
Imports								
Bisc. & cookies	12830	13920	18054	19773	27853	29641	30801	23.3
Bakery products n.e.s.*	9603	9577	10205	12213	14907	18162	22283	22.0
Bread except Passover rolls	N/A	N/A	N/A	N/A	N/A	1571	1984	26.3[a]
Rolls & buns unsweetened	N/A	N/A	N/A	N/A	N/A	1729	853	-50.7[a]
Macaroni products	3060	4795	5012	6878	8376	7954	9232	33.6
Breakfast cereal foods	2210	3761	9963	11814	15151	8096	9830	57.5
Cereal grain products n.e.s.*	9011	9226	8552	14312	29357	21920	24449	28.6
TOTAL IMPORTS	36714	41279	51786	64990	95644	85773	96595	27.2
- except bread, rolls & buns								
a % change 85-86								
Exports								
Bisc. & cook., except soda bisc.	18227	18789	22450	28243	35701	48228	58565	36.9
Bakery products n.e.s.*	24319	23443	22500	23925	26895	29422	33067	6.0
Bread rolls & buns	1078	2423	8598	10053	10887	11705	14180	-
Macaroni products	10484	13307	12890	12700	13446	14413	14894	7.0
Breakfast cereal foods	3180	4412	5385	4314	4782	5262	12467	48.7
Cereal grain products n.e.s.*	1947	2674	2069	1489	2007	2828	5582	31.1
TOTAL EXPORTS	59235	65048	70892	80724	93718	111858	138759	22.4

n.e.s.* Not elsewhere specified
N/A Not Available
( ) Indicates decline or deficit

Note: BAKERY PRODUCTS n.e.s. includes such items as soda biscuits, bread crumbs, bread sticks, cheese sticks, ice cream cones etc.
CEREAL GRAIN PRODUCTS n.e.s. includes items such as cake mixes, corn sticks, pancake mix, pie crust mix, pizza mix, minute rice.

Source: Statistics Canada: Exports Merchandise Trade, Annual, Cat. No. 65-202;
Imports, Merchandise Trade, Annual, Cat. No. 65-203
Exports by Commodities, December 1985, Cat. No. 65-004;
Imports by Commodities, December 1985, Cat. No. 65-007; and
Bread and Rolls detail for imports from the Trade Section.

Table 8.7: Ontario's Major Trading Partners in Wheat-Based Products, 1986

	Exports	'000 kg		Imports	'000 kg
1.	Biscuits/Cookies		1.	Biscuits/Cookies	
	U.S	23412.63		U.S.	3575.4
	Puerto Rico	167.28		U.K.	3397.9
	Trinidad-Tobago	69.08		The Netherlands	1108.1
2.	Bakery Products n.e.s.		2.	Bakery Products n.e.s.	
	U.S.	28049.09		U.S.	9070.87
	Norway	234.58		W. Germany	1153.63
	U.K.	212.70		U.K.	508.74
3.	Macaroni Products		3.	Macaroni Products	
	U.S.	12250.64		Italy	4871.46
	U.K.	70.97		U.S.	2176.63
	Lee. Wind. Is.	39.96		Hong Kong	745.10
4.	Breakfast Cereal Foods		4.	Breakfast Cereal Foods	
	U.S.	5181.09		U.S.	5455.83
	Trin. Tobago	410.34		Switzerland	19.38
	Barbados	267.71		U.K.	.17

Source: Statistics Canada, Cat. No.'s 65-202, 65-203, 65-004, & 65-007.

Table B.8 - Importance of the U.S. as a Trading Partner of Ontario

		U.S. as % Ontario Exports
1.	Biscuits	98.4
2.	Bakery	97.3
3.	Macaroni	98.85
4.	Breakfast Cereal	82.5

Source: Statistics Canada, Cat. No.'s 63-202, 63-203, 63-004, & 63-007.

APPENDIX C

COST OF RAW WHEAT IN END PRODUCTS

SOFT WHITE WINTER WHEAT

FACTSHEET #11/86

"COST OF RAW WHEAT IN END PRODUCTS"
SOFT WHITE WINTER WHEAT

Since consumer groups show just concern over the rising cost of basic foodstuffs, the following illustrates the value of Ontario soft white winter wheat in some products. It must be stressed that the price being used reflects only the price set by the board for wheat sold to processors and does not reflect the cost of the processor or manufacturer of converting the raw products to the finished products.

For wheat processed in November 1986 -
1.000 tonne of wheat equals $265.40
1.440 tonne of wheat ($382.18) equals 1.000 tonne of flour. The .440 tonne is by product sold as bran, shorts and middlings to the feed trade. One tonne of flour = 10,000 - 400 gram bags of cookies.

Sweet cookies are 25% flour

Cost of wheat per bag = $\frac{\$382.18}{10,000}$ = $.038 per bag

(1985 - $.032) (1984 - $.032) (1983 - $.031) (1982 - $.03) (1980 - $.028). Average cost in Ontario is $.798 per 100 grams, a bag of 400 grams would be $3.19. Percent value of wheat per bag is (1.2% in 1986) (1.1% in 1985) (1.1% in 1984) (1.2% in 1983) (1.3% in 1982) (1.6% in 1980).

Solid cookies are 50% flour

Cost of wheat per bag is ($.076 in 1986) ($.07 in 1985) ($.068 in 1984) ($.07 in 1983) ($.068 in 1982) ($.057 in 1980). Average cost in Ontario is $.664 per 100 grams. A 450 gram bag is $2.99. Percent value of wheat per bag is (2.5% in 1986) (2.7% in 1985) (2.7% in 1984) (2.8% in 1983) (3.2% in 1982) (3.5% in 1980).

Crackers are 80% flour

One tonne of flour = 2,777 - 450 gram packages of crackers. Cost of wheat per package = ($.138 in 1986) ($.115 in 1985) ($.114 in 1984) ($.115 in 1983) ($.113 in 1982) ($.091 in 1980). The average cost in Ontario is $.332 per 100 grams. A 450 gram package would be $1.49. Percent value of wheat per bag is (9.3% in 1986) (8.27% in 1985) (7.1% in 1984) (7.5% in 1983) (8.3% in 1982) (8% in 1980).

Cereals made from 100% wheat

One tonne of wheat at 14.5% moisture = 2,000 - 500 gram boxes of cereal at 5% moisture. Average cost per 100 grams is $.538. Cost for 500 gram box is $2.69. Cost of wheat per box is $\frac{\$265.40}{2,000} = \$.133$

Percent value of wheat per box is $4.9% in 1986) (4.9% in 1985) (5.0% in 1984) (5.9% in 1983) (7.0% in 1982) (6.6% in 1980).

Product	1980	1982	1983	1984	1985	1986	% increase '86 over '85
Sweet Cookies	$1.65	$2.29	$2.49	$2.59	$2.79	$3.19	14.3%
Solid Cookies	$1.59	$2.09	$2.39	$2.48	$2.59	$2.99	15.4%
Crackers	$1.13	$1.35	$1.49	$1.59	$1.39	$1.49	7.2%
Cereal	$1.09	$1.49	$1.74	$2.15	$2.25	$2.69	19.6%

The board is always trying to promote the use of Ontario wheat for domestic products as traditionally this is the best market for the board.

November 1986

APPENDIX D

PRICE COMPARISON OF SELECTED WHEAT-BASED GOODS

Table D.1: Comparison of Selected Wheat-based Products in Selected Regions and Cities of U.S. and Canada, 1987

Canadian	Retail Price	U.S.	Retail Price	
			$ Cdn.	$ U.S.
White Sliced Pan Bread (24 oz.)				
Toronto	.94	National Avg.	1.11	.81
Hamilton	.69	Northeast	1.43	.84
Windsor	.96	Northcentral	1.10	.81
Montreal	1.19	South	1.01	.75
Vancouver	1.40	West	1.04	.77
Winnipeg	1.10			
Soda Crackers 1 lb. (450 g)				
Toronto (store)	1.46	National	1.37	1.01
Hamilton (store)	1.46	Northeast	n/a	n/a
Windsor (store)	1.39	Northcentral	1.32	.97
Montreal (mfgr.)	1.87	South	1.37	1.01
Vancouver (mfgr.)	1.68	West	n/a	n/a
Winnipeg (mfgr.)	1.83			
Spaghetti 1 kg. (mfgr. brand)				
Toronto	1.38	National Avg.	.98	.72
Hamilton	1.43	Northeast	.94	.69
Windsor	1.47	Northcentral	.96	.71
Montreal	n/a	South	1.01	.74
Vancouver	n/a	West	n/a	n/a
Winnipeg	n/a			
Chocolate Chip Cookies 450 g (mfgr. brand)				
Toronto	3.12	National Avg.	2.69	1.98
Hamilton	3.12	Northeast	n/a	n/a
Windsor	3.19	Northcentral	2.59	1.90
Montreal	n/a	South	2.76	2.03
Vancouver	n/a	West	n/a	n/a
Winnipeg	n/a			

n/a - not available

Source: Canadian Prices - Ont. Ministry of Consumer and Commercial Relations.
U.S. Prices - Bureau of Labour Statistics, Department of Labour.

Table E.1: Bakery, Biscuit, Cereal and Pasta Products
Establishments in Ontario, 1984 - employing over 100 people

Company	Location	Immediate Owner	Country of Parent
Bread & Bakery:			
Cdn. Pizza Crust	Mississauga	Cdn. Pizza Crust Co. Ltd.	Canada
Consolidated Foods	Brampton	Consolidated Foods Int'l	U.S.
Corporate Foods	Toronto	Maple Leaf Mills Ltd.	U.K.
Corporate Foods	Scarborough	Maple Leaf Mills Ltd.	U.K.
Dimpflmeier Bakery	Toronto	Minast Ltd.	Canada
General Bakeries	Toronto	Dominion Stores (Ontario)	Canada
General Bakeries	Orillia	Dominion Stores (Ontario)	Canada
General Bakeries	London	Dominion Stores (Ontario)	Canada
General Bakeries	Kingston	Dominion Stores (Ontario)	Canada
Margarets Fine Foods	North York	General Bakeries Ltd.	Canada
Open Window Bakery	North York	Open Window Bakery	Canada
Shaw Baking Co. Ltd.	Thunder Bay	n/a	n/a
Silverstein Bakery	Toronto	n/a	n/a
The Great A & P Co.	Toronto	The Great A & P Tea Co. Ltd.	Canada
Weston Bakeries Ltd.	Toronto	George Weston Ltd.	Canada
Weston Bakeries Ltd.	Kitchener	George Weston Ltd.	Canada
Weston Bakeries Ltd.	Kingston	George Weston Ltd.	Canada
Biscuit:			
Ass. Biscuits - Dad	Scarborough	Associated Biscuits (Canada)	U.S.
Ass. Biscuits - Peek	East York	Associated Biscuits (Canada)	U.S.
Beatrice Int'l	Cambridge	Beatrice Foods Canada Ltd.	U.S.
Beatrice Int'l	Kitchener	Beatrice Foods Canada Ltd.	U.S.
Dare Foods Ltd.	Kitchener	Dare Foods Ltd.	Canada
Dover Industries	Hamilton	Dover Industries Ltd.	Canada
Interbake Foods	London	George Weston Ltd.	Canada
Nabisco Brands	Etobicoke	Nabisco Brands Investments	U.S.
W & H Voortman	Burlington	W & H Voortman Ltd.	Canada
Pasta:			
General Mills Canada	Toronto	Toronto Macaroni & Imported Foods	U.S.
Primo Foods Ltd.	North York	Ontario Ltd.	Canada
Prepared Flour Mixes & Cereal Foods:			
General Mills Canada	Etobicoke	Toronto Macaroni & Imported Foods	U.S.
Kellogg Salada Canada	London	Kellogg Company	U.S.
Nabisco Brands Ltd.	Niagara Falls	Nabisco Brand Investments	U.S.
The Quaker Oats Co.	Peterborough	The Quaker Oats Co.	U.S.